## Combined Methods Impurities in Polymer Grade Propylene

Configuration of an Agilent Technologies 7890N Series Gas Chromatograph with dual flame ionization detectors (FID/FID) for the Trace Impurities in Polymer Grade Propylene.

## **FID I - Determines Components**

- Carbon monoxide
- Carbon dioxide
- Methane

Lower expected quantifiable limit is 0. 2 ppm for each. (See line item #2 for LQL of 0. 10 ppm)

## **FID II - Determines Components**

- Methane
- Ethane
- Ethylene
- Propane
- Propylene
- Acetylene
- Isobutane
- n-Butane
- Propadiene
- trans-2-Butene
- 1-Butene
- Isobutene
- cis-2-Butene
- Isopentane
- · Methyl acetylene
- n-Pentane
- 1.3-Butadiene

Lower quantifiable limit is 2 ppm for all components except those eluting on the tail of a major preceding peak. Oxygen in the sample must not exceed 500 ppm.